

Fig. 1

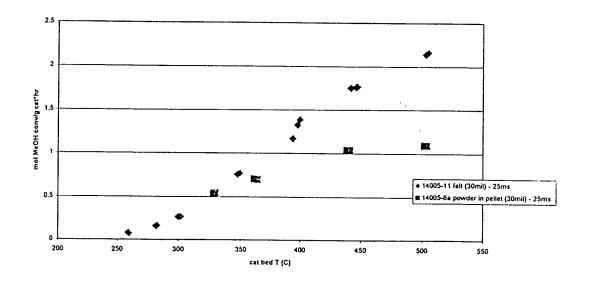


Fig. 2

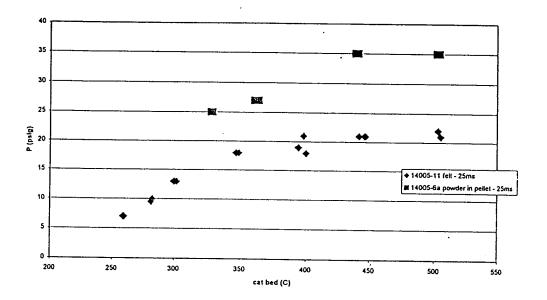


Fig. 3

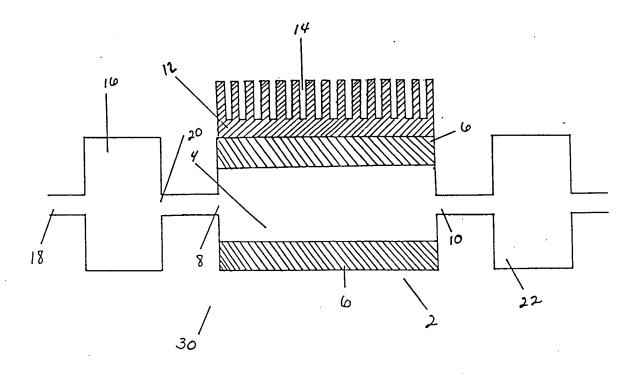


Fig. 4

## **Experimental Set-up**

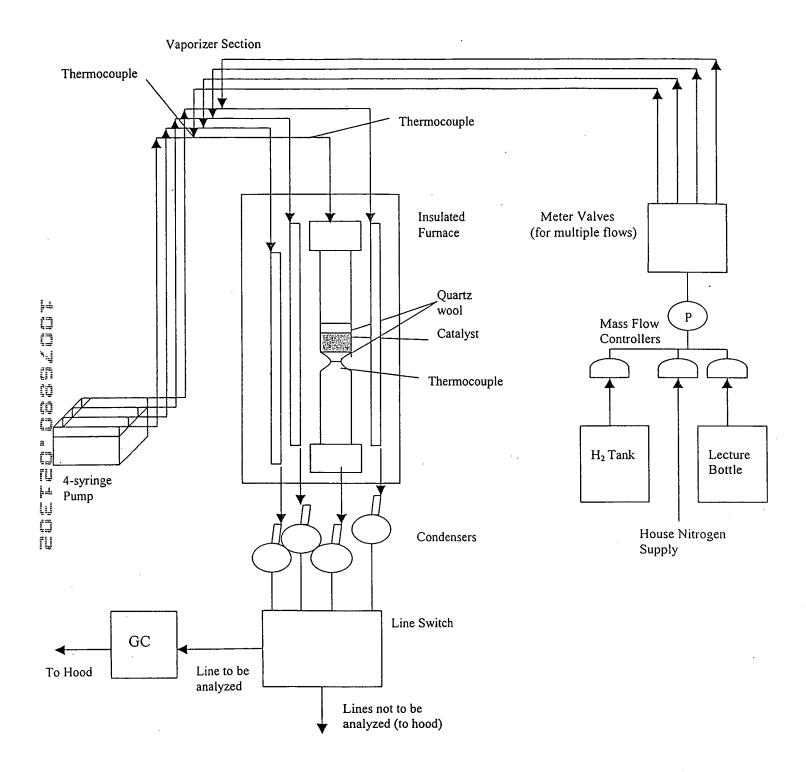
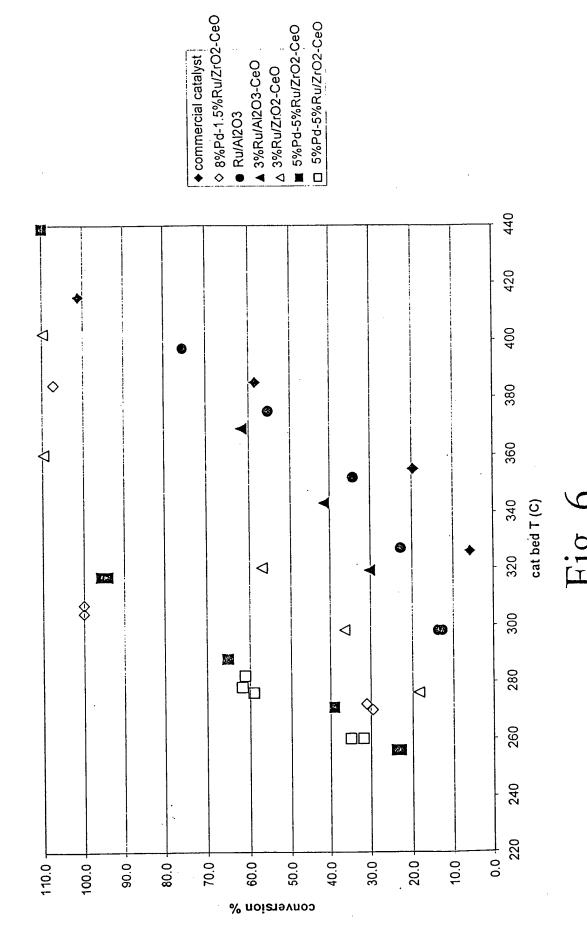


Fig. 5

MeOH SR (CT=300ms, P=1 atm, H2O:C=1.8)



(CT=300ms, P=1 atm, H2O:C=1.8)

MeOH SR - H2

♦ 8%Pd-1.5%Ru/ZrO2-CeO □ 5%Pd-5%Ru/ZrO2-CeO ■ 5%Pd-5%Ru/ZrO2-CeO O 3%Ru/AI2O3-0.6%K ▲ 3%Ru/AI2O3-CeO ∆ 3%Ru/ZrO2-CeO ◆ commercial cat. Ru/Al2O3 420 0 ◁ 400 0 380 0 **\( \)** 360 ◁ 340 0 cat bed T 320 献祭 0 300 280 260 240 **♦** 00.001 220 0.00 10.00 20.00 80.00 90.00 70.00 60.00 40.00 30.00 50.00 H2 sel

Fig. 7

420 0 ( 0 **MeOH SR** (CT=300ms, P= 1 atm, H2O:C=1.8) 370 cat bed T (C) 8 320 0 270 ♦ **\( \)** 220

80.00

70.00

60.00

50.00

CO sel

40.00

30.00

20.00

10.00

90.00

100.00

♦ 8%Pd-1.5%Ru/ZrO2-CeO

□ 5%Pd-5%Ru/ZrO2-CeO

△ 3%Ru/ZrO2-CeO

▲ 3%Ru/AI2O3-CeO

Ru/AI2O3
Ru/AI2O3-K

◆ commercial cat.

Fig. 8

0.00